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Proposed Amendments to Regulations:

- **Sewer System Extension and Connection Permit Program (including Sanitary Sewer Connections and Extensions, as well as Industrial Waste Water Discharges to Sewers (314 CMR 7.00)**
- **Operation and Maintenance and Pretreatment Standards for Wastewater Treatment Works and Indirect Dischargers (314 CMR 12.00)**
- **Board of Registration of Operators of Wastewater Treatment Facilities (257 CMR 2.00)**
- **Environmental Results Program Certification (310 CMR 70.00)**
- **Industrial Wastewater Management for Biotechnology Operations (314 CMR 17.00)**
- **Industrial Wastewater Regulations for Photo Processors and Printers (310 CMR 71.00)**
- **Surface Water Discharge Permit Program (314 CMR 3.00)**
- **Air Pollution Control Regulations (310 CMR 7.00)**
- **Timely Action Schedule and Fee Provisions (310 CMR 4.00)**

July 27, 2006

Proposed Amendments to Regulations Governing Sanitary Sewer Connections and Extensions (314 CMR 7.00), Industrial Waste Water Discharges to Sewers (314 CMR 7.00 and 12.00), Environmental Results Program (310 CMR 70.00), and Industrial Wastewater Management for Biotechnology Operations (314 CMR 17.00)

Background

The Massachusetts Department of Environmental Protection (MassDEP) is proposing to revise several sets of regulations relating to wastewater management, and seeks public comment on these proposals. This package includes amendments to regulations governing state approvals for sanitary sewer connections and sanitary sewer extensions (Part I), and industrial wastewater discharges into Publicly Owned Treatment Works (Part II). In Part III, MassDEP is also proposing revisions of the Environmental Results Program (ERP) regulations which establish criteria under which the MassDEP may require different certification periods for ERP sectors which have annual certifications. Finally, in Part IV, the Department proposes to streamline rules for industrial wastewater management at biotechnology operations.

These significant proposed changes must be viewed in the context of the overall program covering surface water discharges, the National Pollution Discharge Elimination System (NPDES). Massachusetts has not taken delegation of the NPDES program from the United States Environmental Protection Agency (USEPA). Consequently, USEPA is the NPDES authority in Massachusetts implementing and enforcing the federal program requirements. As the NPDES authority in Massachusetts, USEPA has responsibility for pretreatment program oversight as part of the NPDES program. Massachusetts considered taking delegation for the NPDES program in the 1980s and, in preparation for delegation, Massachusetts promulgated several regulations, including 314 CMR 7.00 covering sewer discharges. Now, in view of the fact that Massachusetts has not taken delegation, these regulations are not only redundant with the federal program requirements, they are overly broad in jurisdiction. For example, current regulations require permits for almost every non-sanitary sewer discharger. The total number of dischargers covered by existing regulations is estimated to be well over 60,000 facilities, including some discharging minute quantities of benign wastewater (e.g., floor washing waste from a one-room office). In addition, the current sewer discharge permit regulations are largely redundant with locally issued permits.

MassDEP has evaluated the sewer discharge control program in its full context to develop these proposed changes. The proposed changes will maintain the protection of public health and the environment since the Publicly Owned Treatment Works (POTW) that ultimately receive the wastewater are monitored and routinely inspected by MassDEP. POTW discharges are routinely tested and analyzed. Testing includes whole effluent toxicity testing (acute and chronic), an indicator of potential toxic discharges to POTWs, including industrial wastes. The results of these toxicity tests are used to determine whether improvements are needed at the POTW or whether additional local controls on industry are necessary.

Part I: Sanitary Sewer Connection and Extension Regulation Revisions

Currently, applicants who are connecting to a municipal collection system with flows in excess of 15,000 gallons per day or who are extending a sewer are required to obtain a permit from the local municipality and Massachusetts Department of Environmental Protection (MassDEP). The proposed changes to the sanitary connection and extension provisions in the sewer regulations are intended to remove duplication and overlap between the local approving authority and MassDEP, allowing MassDEP staff to focus on sanitary sewer overflows and direct discharges to surface and groundwater resources.

Permits and plans are currently prepared by Massachusetts Registered Professional Engineers. All sewer extension and connection permit applicants obtain a permit from the municipality where the project is located. The proposed changes to the sanitary sewer extension connection regulations (314 CMR 7.00) are intended to streamline the permitting process by allowing applicants for sewer connection permits and permits for sewer extensions of less than 1000 feet to only obtain a local permit and avoid the duplicative review and permitting by MassDEP.

Under the proposed revisions, sanitary sewer connections and extensions would be subject to the following:

1. Any new sewer connection that discharges 15,000 gallons per day or more or increases flow by 15,000 gallons per day or more to an existing sewer connection would be required to submit to MassDEP a one-time certification statement pursuant to 310 CMR 70.00 rather than an individual permit.
2. Both sanitary and industrial sewer connections above 50,000 and 5 percent of the receiving wastewater treatment plant's design flow will require presumptive permits addressing their impact on sewer collection system capacity
3. Any new sewer extension that is less than 1,000 feet in length would be required to submit to MassDEP a one-time certification statement pursuant to 310 CMR 70.00 rather than an individual permit.
4. Any sewer extension that is 1,000 feet or more in length would be subject to a MassDEP permit. Such permits would be deemed approved within forty-five days of receipt of a completed application unless MassDEP issues a statement denying the permit or a notice of deficiency within that time.
5. Any prospective applicant for a proposed sewer extension project with a project approval certificate pursuant to the Clean Water State Revolving Fund Program would be exempt from the permitting process due to the detailed review and public participation process entailed as part of the project approval certification process.

In addition, language changes are being proposed to address a variety of issues. The first change at 314 CMR 7.04(1) clarifies MassDEP's authority to impose the removal of infiltration

and inflow (I/I) from a collection system. This will aid MassDEP in requiring the removal of I/I in communities experiencing sanitary sewer overflows and combined sewer overflows. The second change at 314 CMR 7.06(3) would allow MassDEP to better protect public water supplies by making the sewer construction requirements consistent with the Water Supply Program and the Bureau of Resource Protection's policies. Specifically, the second change would prohibit sewer construction within a Zone I of a Public Water Supply Well or a Zone A of a Public Surface Water Supply except to allow construction of a connection to address an existing pollution problem. Finally, language has been added to 314 CMR 7.03 to give MassDEP authority to require applicants to submit information, such as the number of overflow events for a certain period. This change is similar to EPA's use of 308 letters requesting information.

Part II: Industrial Wastewater Sewer Discharge Regulation Revision

MassDEP is proposing to revise the current industrial wastewater sewer discharge control program, terminate the forbearance program that is in place, and replace it with a performance-based system to assess compliance with environmental performance standards. Similar to the proposed changes to the sanitary sewer connection regulations, these changes will eliminate redundancy with the currently duplicative local sewer discharge permit programs. The revisions will maintain and enhance the existing effluent quality standards and streamline procedural requirements.

The current industrial wastewater sewer discharge control program, established in 314 CMR 7.00 and 314 CMR 12.00 (adopted in 1979), includes MassDEP review and approval of site-specific permits and plans. These regulations require each Massachusetts business that discharges wastewater from its industrial process (not sanitary waste) to a sewer to obtain a permit for that discharge from MassDEP. These permits largely duplicate those issued by local or regional Publicly Owned Treatment Works (POTW), which ensure that the specific types and volumes of industrial wastewater can be handled safely by the POTW. By eliminating the requirement to obtain a state discharge permit, this proposal will provide regulatory relief to tens of thousands of Massachusetts businesses.

A review by MassDEP in 1997 indicated that these discharges posed a low potential risk of harm to public health or the environment, because existing local and federal controls at POTWs provide adequate safeguards. The review also indicated that only several hundred facilities had actually obtained a permit, although the regulations required thousands of industrial sewer dischargers to obtain permits.

Therefore, in 1997, MassDEP instituted a "permitting forbearance" policy that was intended to lead to a redesign of the industrial wastewater permit program. Since issuing the forbearance policy in 1997, MassDEP has discussed proposed discharges of industrial wastewater to sewers with facility owners and operators to assess their environmental significance. Under the forbearance policy, if MassDEP determines that federal or local permitting or other controls are adequate, then a state discharge permit is not required. This finding is communicated to the applicant in a letter that details the existing requirements and

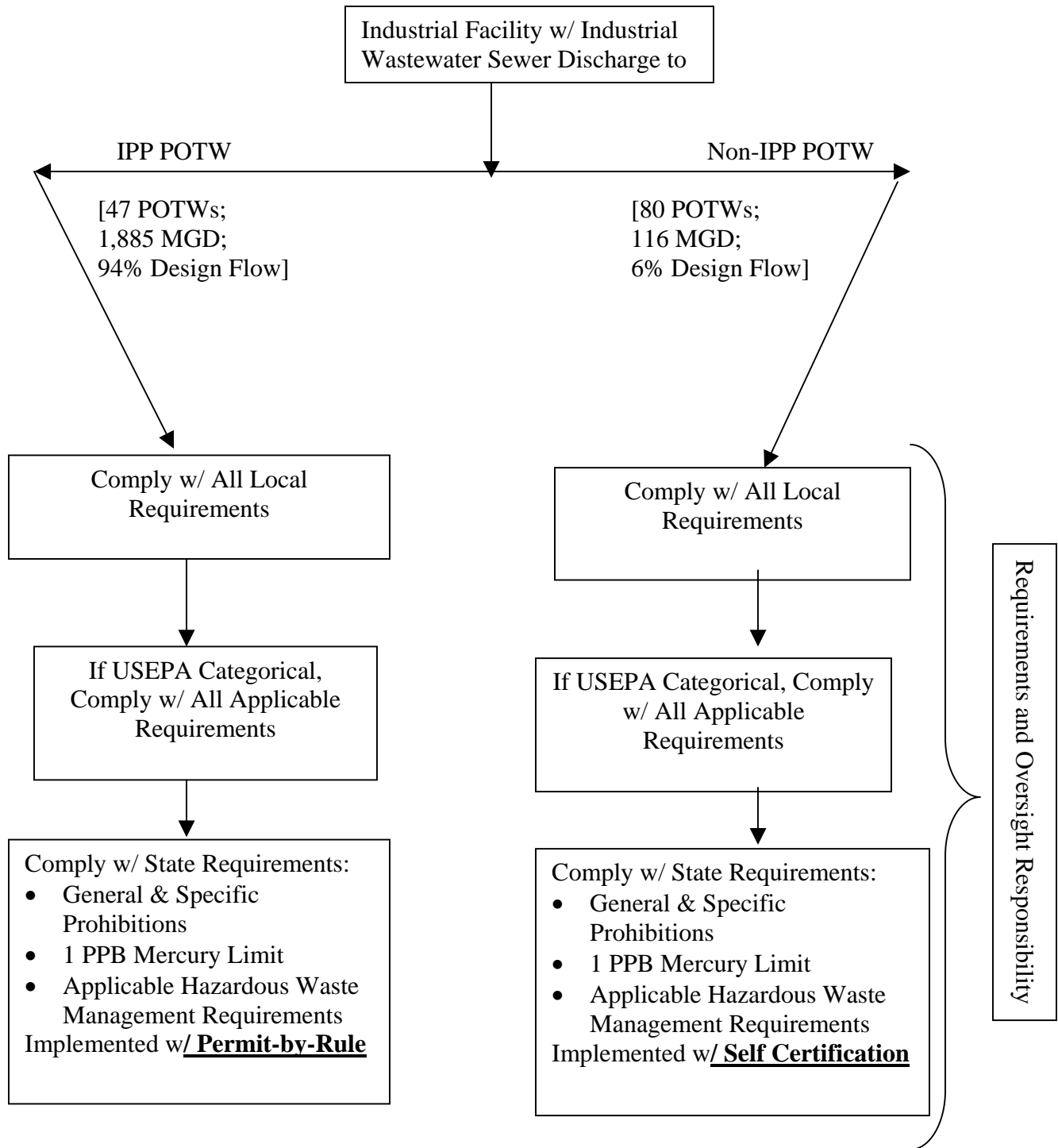
states that the company will be notified when new regulations are adopted. If the Department determines that a discharge does require additional controls, or if the applicant requests a case-specific permit, it issues a state discharge permit. MassDEP has continued to inspect industrial wastewater generators as part of its multi-media business inspections, and to enforce regulatory performance standards where necessary.

The proposed regulatory revisions would replace the forbearance policy with a new approach designed to improve environmental results while streamlining procedural requirements. The proposal would eliminate redundant permits. It would also shift MassDEP's primary focus to the oversight of state standards and to direct discharges from POTWs to waterways:

- The proposal would replace the permitting forbearance policy and the 34 remaining site-specific state permits that duplicate permits provided by municipalities or sewerage districts with either a statewide "permit by rule" or a certification filed by business owners and operators. This would eliminate redundant reviews by MassDEP, and would place more responsibility for ensuring compliance with state wastewater standards for discharges to sewers with the businesses that discharge their industrial wastewater to sewers, subject to inspection and enforcement. Note, however, that new or increased sanitary and industrial wastewater sewer connections that result in a discharges that are greater than 50,000 gpd and exceed five percent (5%) of the receiving wastewater treatment facility's permitted flow require presumptive permits from MassDEP pursuant to 314 CMR 7.09(6) addressing their impacts on sewer collection system capacity
- The proposal would focus MassDEP's resources on assessing compliance by industrial wastewater dischargers and POTWs with environmental standards for discharges. POTWs will continue to be subject to strict permit limitations by MassDEP and by the United States Environmental Protection Agency (USEPA) if the POTW discharges treated wastewater to surface water. Resources would be available to work with POTWs to maintain and improve their environmental performance.
- The proposal would maintain existing environmental standards that limit allowable levels of contaminants and parameters in industrial wastewater discharges to sewers. These standards would be augmented by establishing a statewide discharge limit for mercury of one part per billion.
- The proposal would not affect existing requirements for POTWs, including limits on specific contaminants and parameters in their discharges of treated wastewater into waterways.

Figure 1 presents a conceptual diagram of the proposed regulation amendments. Major provisions of the proposal are described in more detail below.

FIGURE 1
Conceptual Diagram of Proposed Approval Process for
New Industrial Wastewater Discharges to Sewers



1. Streamlining Up-front Case-Specific Approvals

The municipal and regional sewerage authorities that operate POTWs already require permits for industrial wastewater discharges. USEPA requires larger POTWs (i.e., generally greater than 5 MGD) that receive significant industrial flows to implement industrial pretreatment programs that issue case-specific permits to their significant industrial dischargers¹. Local or regional approvals are designed to ensure that the POTWs can treat the contaminants in the wastewater they receive, so that their wastewater discharge can meet their NPDES permit requirements. In addition, USEPA requires larger industrial dischargers to POTWs without industrial pretreatment programs to submit biannual reports to USEPA to confirm their compliance with applicable categorical requirements. USEPA uses these requirements to ensure that POTWs can meet the environmental standards established in their discharge permits. Smaller POTWs with minor industrial wastewater contributions are not required to establish industrial pretreatment programs.

Massachusetts currently has 128 POTWs, with a total wastewater design flow of about 2,000 million gallons per day (MGD). Forty-eight of these POTWs have established industrial pretreatment programs, and account for 94% of the state's total design flow of 1,885 million gallons per day (MGD) capacity. The remaining 80 POTWs that do not have industrial pretreatment programs account for only 6% of the State's design flow, or 115 MGD.

MassDEP is proposing to replace case-specific state discharge permits with two pathways:

- Pathway 1 would cover firms that discharge industrial wastewater to POTWs that have federally approved pretreatment programs. These businesses would be required to meet state standards under a "permit by rule".
- Pathway 2 would cover firms discharging industrial wastewater to POTWs that do not have a federally approved pretreatment program. These firms would be required to submit compliance certifications to MassDEP, signed by a company official, that declare the company is in compliance with state standards.

Like case-specific permits, businesses subject to the permit by rule and compliance certifications will be subject to MassDEP compliance assurance and enforcement oversight. MassDEP would reserve its authority to require a case-specific permit for unusual cases, e.g., those involving multiple parties contributing industrial wastewater from a single location, or to resolve significant compliance problems.

Under the proposed program, state approvals of industry pretreatment system plans, called plan approvals, will not be required. While plan approvals are still important for local and regional sewerage authorities (to ascertain that the system can handle the industrial flows). MassDEP is proposing to delete this redundant requirement.

The proposed approach would also allow MassDEP to delete a regulatory provision that allows the agency to delegate oversight of the state industrial sewer discharge permit program to

¹ Significant industrial discharges are defined as those dischargers that average greater than 25,000 gallons per day, contribute greater than 5 percent of the POTW's hydraulic or organic flow, or present specific concerns (e.g., a discharger, or class of dischargers, with the potential to contaminate the POTW's sludge).

POTWs (314 CMR 7.16). The current delegation provision allows MassDEP to designate qualified POTW industrial wastewater discharge permit programs to take the place of the state permit program. Under the proposed program, industrial wastewater sewer dischargers would not need a state sewer permit and therefore delegation would no longer be necessary. To date, only the Massachusetts Water Resources Authority's industrial pretreatment program has received this delegation from MassDEP.

2. Maintaining existing state environmental standards for industrial wastewater discharges to sewers, augmented by a new statewide discharge limit for mercury

The proposal would not change any existing state discharge standards for either industrial wastewater or for POTW discharges to receiving waters². MassDEP is also proposing to add a statewide limit for industrial wastewater discharges to sewers for mercury. The new limit would be established at one part per billion (ppb). This is consistent with the goals of the Massachusetts Zero Mercury Discharge Strategy, adopted by the Executive Office of Environmental Affairs in 2000³. Mercury is a potent toxic metal that biomagnifies in the environment. Facilities in the MWRA district, which are subject to the MWRA's one ppb mercury limit, have generally been able to meet the standard. MassDEP believes that the one ppb standard is achievable through careful management of mercury-containing chemicals and generally will not require dischargers to install new pretreatment controls.

3. Streamlining Requirements for Certified Treatment Operators

Currently, industrial sewer dischargers with pretreatment systems need to grade the pretreatment system according to the provisions in 257 CMR 2.00 and then staff the pretreatment system with the requisite certified personnel. The proposed regulation would exempt most laboratories that neutralize relatively small amounts their corrosive wastewater in accordance with 310 CMR 30.000 from the requirement to have a certified operator.

MassDEP is seeking information as to the potential environmental risks of exempting all corrosive wastewater which has been neutralized in accordance with 310 CMR 30.000 from the provisions of 257 CMR 2.00.

Part III: Environmental Results Program Regulation Revisions

MassDEP is also proposing to revise regulations at 310 CMR 7.00, 70.00, and 71.00, to make changes in the Environmental Results Program (ERP) rules. In the past these regulations have been revised piecemeal to add new ERP sectors. In the proposed revisions, MassDEP is revising the regulations to make them easier to understand. This change involves rearranging some of the existing sections. The version available for comment retains the old language in the new sections so the reader may see where the language has been revised. For

² Parameters include wastewater temperature, viscosity, flammability, explosivity, and corrosivity.

³ This Strategy is available at www.mass.gov/eoea/.

example, the old section 70.03(3) is now contained in 70.03(2)(d) so 70.03(2)(d) is shown in regular not redline type.

In addition to these changes, MassDEP also is adding sewer connection and extensions to the ERP regulations as discussed earlier.

Finally, the proposed regulations establish criteria that MassDEP may apply to require less frequent certification periods for ERP sectors that submit annual certifications. The proposed revision would allow MassDEP to vary the certification frequency for any sector in the Environmental Results Program, based on assessments of environmental compliance and risk, as well as MassDEP resources and priorities. As part of the process to change the certification frequency for any sector, MassDEP will notify the public and affected businesses by publishing a notice in the Massachusetts Environmental Policy Act Monitor and may also notify the affected ERP sector through industry trade associations, MassDEP's website, and mailings.

After the final promulgation of these regulations, MassDEP expects to apply the criteria to revise the frequency with which photo processors are required to file certifications from one year to five years, due to the high level of environmental compliance and performance achieved by this regulated group. This proposal stems from an evaluation of the photo processor sector's environmental performance, a sector regulated under the Environmental Results Program since 1997. This evaluation, conducted in 2003, found strong evidence that photo processing facilities, as a group, have achieved a significantly high level of compliance. MassDEP believes that certifications filed every 5 years will be sufficient to maintain this level of compliance and that annual certifications are no longer necessary.

During each five-year period, photo processors would need to continue to comply with all performance standards but would not be required to submit an annual certification statement to MassDEP. New facilities and existing facilities with a change-of-address or change-of-ownership would still need to submit an initial certification within 60 days of these events. At this time, MassDEP intends to retain the established certification frequency requirements for other existing ERP sectors.

Part IV: Streamlining Industrial Wastewater Management for Biotechnology Operations (314 CMR 17.00)

MassDEP proposes to streamline biotechnology industrial wastewater requirements. Industrial wastewater from biotechnology facilities does not appear to pose specific issues for POTWs beyond those routinely presented by other types of industrial discharges (e.g., metal cleaning operations and electronics manufacturing). To make the requirements for biotechnology operations consistent with the requirements for all other industrial sewer dischargers, MassDEP proposes to delete the industry-specific regulations, Industrial Wastewater Management for Biotechnology Operations (314 CMR 17.00). Presently 314 CMR 17.00 requires biotechnology facilities to file certifications with MassDEP and a one-time report on toxic chemicals used and their potential to be discharged in wastewater. More reasonably under the proposed rules, all industrial sewer dischargers would be covered either by 1) permit-by-rule for facilities discharging to POTWs with industrial pretreatment permit programs or 2) certifications for facilities discharging to POTWs without industrial pretreatment permit programs. MassDEP believes that the proposed regulation amendments described in Part II of this document will provide adequate protection from problems posed by wastewater discharges from all industries, and that the specific requirements for biotechnology facilities will no longer be needed.

Part V: Timely Action Schedule and Fee Revisions (310 CMR 4.00)

The permitting and annual compliance fees (ACF) and timely action schedules established by regulation in 310 CMR 4.00 and authorized under Massachusetts General Law, chapter 21 A section 18 closely parallel the requirements of the Department's regulatory programs. In order to provide for the orderly and efficient administration of the regulatory programs listed above in Parts I through IV, amendments to 310 CMR 4.00 are required. Amendments include the deletion of permit categories for sanitary sewer connections and extensions (BRPWP13, BRPWP14, BRPWP17, BRPWP18, BRPWP55) and ACF categories for Water Pollution Control (WP) and Industrial Wastewater (IW) Sewer Connections and the addition of 4 new categories for permits and certifications (BRPWP69, BRPWP70, BRPWP71, and BRPWP72) and a new ACF category for IW Sewer Connections. Other administrative amendments and clarifications are included. The transition from a permit process for a majority of the existing permit categories to a certification process will be revenue neutral through the implementation of the changes to the Sewer System Extension and Connection Permit Program.